



Name: _____

Mr. Tiénou-Gustafson & Mr. Bielmeier

Geometry, Period _____

Due Date: Tue, 10 Feb 2015

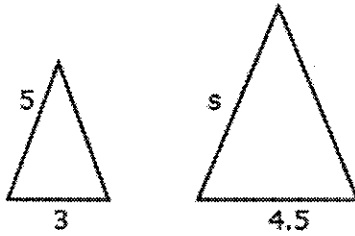
HW98_Ratios

**Geometry
Homework**

Form A

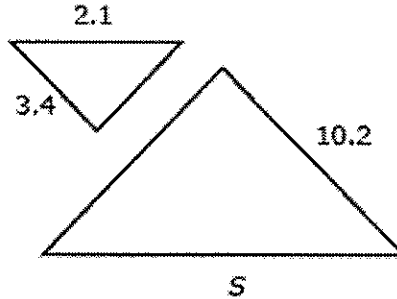
Use a proportion to find the length of segment s in each similar pair.

1.

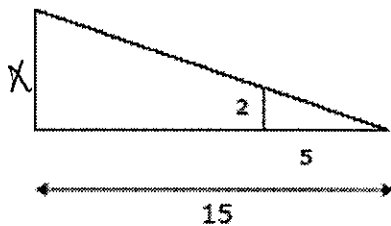


$$\frac{5}{3} = \frac{s}{4.5}$$

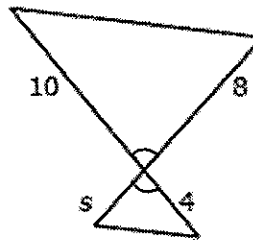
2.



3.



4.



Use ratios to solve the problems below. Show your work. Round to the nearest hundredth if needed.

- 5) A ferris wheel can accommodate 55 people in 20 minutes. How many people could ride the ferris wheel in 2 hours? What was that rate per hour?

120 minutes

- 6) You can buy 5 cans for green beans at the Village Market for \$2.80. You can buy 10 of the same cans of beans at Sam's Club for \$5.70. Which place is the better buy?

$$\frac{\$2.80}{5 \text{ can}} = \frac{\$}{1 \text{ can}}$$

$$\frac{\$5.70}{10 \text{ can}} = \frac{\$}{1 \text{ can}}$$

- 7) The bakers at Healthy Bakery can make 350 bagels in 2 hours. How many bagels can they bake in 22 hours? What was that rate per hour?

1)

In a committee of 50 people, 3 are running for president, 2 are running for vice president, and 3 are running for treasurer. What is the ratio of candidates to non-candidates?

- A. 1:4
B. 3:21
C. 3:25
D. 4:21
E. 4:25

2)

Tim is a competitive tennis player. This season, he has won 52 games and lost 20. What is his ratio of losses to total games played?

- A. 5:18
B. 5:13
C. 5:10
D. 10:11
E. 10:12

$$\frac{\text{won } 52}{\text{lost } 20} \quad \frac{\text{lost}}{\text{total games}}$$

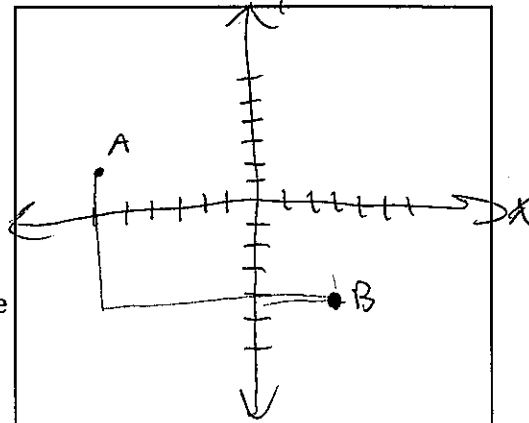
$$\frac{\text{lost}}{\text{total games}}$$

Other Review for the THURSDAY TEST!

(Test includes Pythagorean theorem, distance formula, triangle types, congruent triangles, ratios & similar triangles)

- a) Make a rough sketch of a standard (x, y) coordinate plane with points A $(-6, 2)$ and B $(3, -4)$: \checkmark
b) Use the distance formula to find \overline{AB} in simplified radical form.

$$d = \sqrt{(x_2 - x_1)^2 + (\quad)^2}$$



- c) Draw a triangle with \overline{AB} as one side. Create the second side parallel to the y-axis and the third side parallel to the x-axis. What kind of triangle is this (categorized by angle and side)?

- d) Use the Pythagorean theorem to find the length of \overline{AB} to the hundredth.

- e) Find the slope ("m") of the line \overline{AB} , then solve for the y intercept ("b"), and finally write an equation for the line in point-slope form.

- \checkmark f) If a line parallel to line \overline{AB} passed through the origin $(0, 0)$ and point D $(4n, 8)$, what would be the value of n? What would be the actual coordinate of point D?

- g) If right triangle XYZ had a leg of 6 and a hypotenuse of $3\sqrt{13}$, would it be congruent to the triangle you created in part c? Why or why not? (Include a drawing)

- h) Given $\triangle QRS \sim \triangle XYZ$ and has a shorter leg of 8, find the length of the longer leg.
(Bonus if you can solve two different ways and show or explain why both work!)